

What is claimed is:

1. A method for purifying an immunosuppressant protein (HISP) the method comprising:
 - a) obtaining supernatant from hNT cells;
 - b) exposing the supernatant to preparative polyacrylamide gel electrophoresis to produce 20 isoelectric fractions, including active isoelectric fraction #10;
 - c) placing the active isoelectric fraction on a Blue Sepharose column to bind albumin; and
 - d) collecting the free fraction containing the concentrated, isolated HISP.
2. The compound produced by claim 1.
3. A method of treating inflammation, the method comprising administering an effective amount of an immunosuppressant protein (HISP).
4. An isolated immunosuppressant protein (HISP), said protein comprising an anionic protein
 - having a molecular weight of 40-100 kDa;
 - having an isoelectric point of about 4.8;
 - being obtained from hNT cell supernatant;
 - not being obtained from NCCIT embryonal carcinoma cells, T98G glioblastoma cells or THP-1 monocytic leukemia cells;
 - losing activity when treated with heat, pH2, pH11, or mixed with trypsin or carboxypeptidase;
 - losing no activity when incubated with neuraminidase;
 - being capable of suppressing proliferation of responder peripheral blood mononuclear cells in allogeneic mixed lymphocyte cultures;
 - being capable of suppressing T-cell proliferation and IL-2 production in response to phorbol 12-myristate 13-acetate (PMA), ionomycin and concanavalin-A;
 - being capable of maintaining T cells in a quiescent G₀/G₁ state without lowering their viability;
 - not binding to heparin-sepharose CL-B gel;
 - not binding to albumin-binding resin Blue Sepharose;
 - concentrating with YM10 ultrafiltration; and
 - not acting through the T-cell receptor-CD3 complex or via altered accessory signal cells.

5. A method of treating inflammation, said method comprising administering an effective amount of hNT neuronal cells.